



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,774	09/10/2003	Henry Haverinen	944-001.090-1	4877

4955 7590 05/26/2009
WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP
BRADFORD GREEN, BUILDING 5
755 MAIN STREET, P O BOX 224
MONROE, CT 06468

EXAMINER

DAILEY, THOMAS J

ART UNIT	PAPER NUMBER
----------	--------------

2452

MAIL DATE	DELIVERY MODE
-----------	---------------

05/26/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/659,774

Applicant(s)

HAVERINEN ET AL.

Examiner

Thomas J. Dailey

Art Unit

2452

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4, 7, 10, 13-15, 20, 21 and 24-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 7, 10, 13-15, 20, 21 and 24-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 3/30/2009
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/26/2009 has been entered.
2. Claims 1, 4, 7, 10, 13-15, 20-21, and 24-29 are pending.

Response to Arguments

3. Applicant's arguments with respect to the prior art rejection of the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 4, 10, 13, and 14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
6. Independent claims 4, 10, and 13, respectively recite, "An apparatus, comprising..." "A system comprising..." and "An apparatus, comprising..." where

all of the limitations (e.g. "means for receiving," "authentication server") may be interpreted and implemented as software alone when read in light of the specification. Therefore the claims are directed to functional descriptive material that is not embodied on a computer system or computer storage medium which is non-statutory. In order for the claims to comply with 35 U.S.C. 101, they simply need to explicitly recite hardware elements, see, for example, claim 20.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 4, 7, 10, 13-15, 20-21, and 24-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neill (US Pub. No. 2003/0176188) in view of Bhagwat et al (US Pat. 6,651,105), hereafter "Bhagwat."
9. As to claim 1, O'Neill discloses a method, comprising:
- receiving a request for full authentication of a terminal ([0031], lines 1-8, every mobile device (terminal or end node) will have a home AAA server (see Fig. 1), at this home AAA server will be stored service profiles that inherently require full authentication of that particular mobile device);

transmitting to the terminal a reauthentication identity including a unique realm name uniquely identifying an authentication server ([0053], lines 13-17, the NAI (reauthentication identity) of any end node (terminal) includes a realm name and identifies the home authentication server; it is essential that the realm name is transmitted to the mobile device);

receiving a request for reauthentication from the terminal, the request for reauthentication including the reauthentication identity including the unique realm name uniquely identifying the authentication server ([0053], lines 13-23, any end node (terminal) sending an authentication request identifying its home authentication server (via a "reauthentication identity") reads upon "a request for reauthentication" as the end node was previously authorized by its home authentication server, as that server stores its service profile);

wherein the request for reauthentication is routed to the authentication server according to the unique realm name included in the request for reauthentication ([0053], lines 16-23).

But, O'Neill may not explicitly disclose the transmission to the terminal of the reauthentication identity is in response to the request for the full authentication of terminal. Rather, O'Neill simply discloses the terminal has a reauthentication identity and is full authenticated, but is silent in regards to the order in which those steps occur.

However, Bhagwat discloses transmitting a reauthentication identity to a terminal in response to an authentication request (column 13, lines 18-24, a mobile host (terminal) authenticates with a PPP Back end server, and once authenticated receives a cookie (a reauthentication identity) which allows for fast re-authentication; fast authentication further disclosed in column 13, lines 52-59).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of O'Neill and Bhagwat because the substitution of one known element (i.e. Bhagwat's method of providing a reauthentication identity) for another would have yielded predictable results (fast reauthentication for mobile devices, i.e. the end result of both Bhagwat and O'Neill) to one of ordinary skill in the art.

10. As to claims 4, 7, 13, 15, and 20, they are rejected by the same rationale set forth in claim 1's rejection.

11. As to claim 10, O'Neill discloses a system comprising:

a first authentication server configured to receive a request for full authentication of a terminal ([0031], lines 1-8, every mobile device (terminal or end node) will have a home AAA server (first authentication server) (see Fig. 1), at this home AAA server will be stored service profiles that inherently require full

authentication of that particular mobile device), and configured to transmit to the terminal a reauthentication identity including a unique realm name uniquely identifying the first authentication server ([0053], lines 13-17, the NAI (reauthentication identity) of any end node (terminal) includes a realm name and identifies the home authentication server; that realm name inherently is transmitted to the mobile device); and

a second authentication server configured to receive a request for reauthentication from the terminal, the request for reauthentication including the reauthentication identity including the unique realm name identifying the first authentication service ([0053], lines 13-23, any end node (terminal) sending an authentication request identifying its home authentication server (via a "reauthentication identity") to a visited AAA server (second authentication server) reads upon "a request for reauthentication" as the end node was previously authorized by its home authentication server, as that server stores its service profile), and configured to route the request for reauthentication to the first authentication server according to the unique realm name identifying the first authentication server ([0053], lines 16-23).

But, O'Neill may not explicitly disclose the transmission to the terminal of the reauthentication identity is in response to the request for the full authentication of terminal. Rather, O'Neill simply discloses the terminal has a reauthentication

identity and is full authenticated, but is silent in regards to the order in which those steps occur.

However, Bhagwat discloses transmitting a reauthentication identity to a terminal in response to an authentication request (column 13, lines 18-24, a mobile host (terminal) authenticates with a PPP Back end server, and once authenticated receives a cookie (a reauthentication identity) which allows for fast re-authentication; fast authentication further disclosed in column 13, lines 52-59).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of O'Neill and Bhagwat because the substitution of one known element (i.e. Bhagwat's method of providing a reauthentication identity) for another would have yielded predictable results (fast reauthentication for mobile devices, i.e. the end result of both Bhagwat and O'Neill) to one of ordinary skill in the art.

12. As to claims 27 and 29, O'Neill discloses a method for use by a terminal, they are rejected by the same rationale set forth in claim 10's rejection
13. As to claim 24, O'Neill discloses wherein the authentication network element is an authentication server (Fig. 5, label 114).

14. As to claim 25, O'Neill discloses wherein the authentication network element is a proxy server (Fig. 5, label 135).
15. As to claim 26, O'Neill discloses wherein the authentication network element is a service access point for authentication by an authentication server (Fig. 5, label 128).
16. Claims 14 and 21, are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neill in view of Bhagwat as applied to claims 13 and 20 above, and in view of Barriga-Caceres et al (US Pub No. 2003/0163733), hereafter "Barriga."
17. As to claims 14 and 21, O'Neill and Bhagwat do not explicitly disclose wherein the means for transmitting to an authentication network element a request for reauthentication using the reauthentication identity including the unique realm name includes the reauthentication identity in an identity response packet according to an Extensible Authentication Protocol.

However, Barriga discloses an authentication system (Abstract) that utilizes an Extensible Authentication Protocol ([0101]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of O'Neill and Bhagwat with

Barriga in order to utilize a well-known protocol in the art that would allow O'Neill's system to be compatible with other, already deployed, systems.

Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Dailey whose telephone number is 571-270-1246. The examiner can normally be reached on Monday thru Friday; 9:00am - 5:00pm.
19. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
20. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. J. D./
Examiner, Art Unit 2452

/Dohm Chankong/
Primary Examiner, Art Unit 2452